



USGS NSF GRIP Opportunity

● USGS Center:	National Climate Change and Wildlife Science Center
● Project Title:	Climate Change Adaptation for Fish and Wildlife
● Project Hypothesis or Objectives:	<p>The U.S Geological Survey 's National Climate Change and Wildlife Science Centers (NCCWSC) and the Department of Interior Climate Science Centers (CSC) were started in 2009 to develop science in support of adaption planning for fish, wildlife and their habitat. A broad area of science support from the NCCWSC has focused on the notion of translational science or science to action. One key area of work is the notion of vulnerability assessments of species and systems. One key, relatively unstudied component of vulnerability is the notion of adaptation or adaptive capacity. Properly integrating the notion of adaptation into vulnerability assessment and planning for the future is critical for understanding potential climate change driven impacts on species and systems. The key objective of this fellowship will be to develop or utilize better methods to incorporate the notion of adaption into vulnerability and adaptation planning. Further the incumbent will work with either existing or new projects to translate the notion of adaptation into actionable science.</p>
● Duration:	9-12 months
● Internship Location:	Reston, VA and/or 1 of 8 DOI Climate Science Centers
● Area of Discipline:	Ecology, Biology, Climate Science
● Expected Outcome:	<p>This research and intended results will have a direct impact on a number of USGS NCCWSC and DOI CSC science projects, currently tied to understanding global change impacts to fish, wildlife and their habitat. CSC projects range from understanding changes in permafrost in Alaska to sea level rise impacts on the Atlantic coast. We work closely with other DOI management bureaus such as U.S. Fish and Wildlife Service, Bureau of Reclamation, Bureau of Land Management, Bureau of Indian Affairs and the National Park Service to bring the best science to bear on decision-making. For more information on NCCWSC and the DOI CSC's please see, https://nccwsc.usgs.gov/</p>

 **Special skills/training Required:** Typical tasks include development of scientific approaches to understanding adaptation in an socio-ecological/biological setting. Understanding the needs of management agencies and the ability to work directly with managers to implement scientific results into action will be important. Ability to develop tools for using research output, such as models, visualizations and other approaches are a key component of this job. Completion of a bachelors or masters degree in ecology, biology, fisheries, wildlife, forestry or other related earth science discipline. Also degree plans could be in economics, sociology, anthropology or other disciplines that would emphasize interaction with socio-ecological systems.

 **Duties/Responsibilities:**

1. Research in the area of adaptation and adaptive capacity of species and/or systems especially as applied to global change impacts.
2. Development of models, tools, visualizations and other approaches to incorporate adaptive capacity into natural resource management planning.
3. Work with USGS Scientists and University partners to integrate outputs of research into actionable science projects ongoing within the DOI CSC network.

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